



## Climate change, human health, and biomedical research: Analysis of the National Institutes of Health research portfolio

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### Abstract:

**BACKGROUND:** According to a wide variety of analyses and projections, the potential effects of global climate change on human health are large and diverse. The U.S. National Institutes of Health (NIH), through its basic, clinical, and population research portfolio of grants, has been increasing efforts to understand how the complex interrelationships among humans, ecosystems, climate, climate variability, and climate change affect domestic and global health. **Objectives:** In this commentary we present a systematic review and categorization of the fiscal year (FY) 2008 NIH climate and health research portfolio. **METHODS:** A list of candidate climate and health projects funded from FY 2008 budget appropriations were identified and characterized based on their relevance to climate change and health and based on climate pathway, health impact, study type, and objective. **RESULTS:** This analysis identified seven FY 2008 projects focused on climate change, 85 climate-related projects, and 706 projects that focused on disease areas associated with climate change but did not study those associations. Of the nearly 53,000 awards that NIH made in 2008, approximately 0.17% focused on or were related to climate. **CONCLUSIONS:** Given the nature and scale of the potential effects of climate change on human health and the degree of uncertainty that we have about these effects, we think that it is helpful for the NIH to engage in open discussions with science and policy communities about government-wide needs and opportunities in climate and health, and about how NIH's strengths in human health research can contribute to understanding the health implications of global climate change. This internal review has been used to inform more recent initiatives by the NIH in climate and health.

**Source:** <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3620768>

### Resource Description

#### Communication:

resource focus on research or methods on how to communicate or frame issues on climate change; surveys of attitudes, knowledge, beliefs about climate change

A focus of content

#### Communication Audience:

audience to whom the resource is directed

Researcher

# Climate Change and Human Health Literature Portal

## **Exposure :**

weather or climate related pathway by which climate change affects health

Unspecified Exposure

## **Geographic Feature:**

resource focuses on specific type of geography

None or Unspecified

## **Geographic Location:**

resource focuses on specific location

United States

## **Health Impact:**

specification of health effect or disease related to climate change exposure

General Health Impact

## **Medical Community Engagement:**

resource focus on how the medical community discusses or acts to address health impacts of climate change

A focus of content

## **Model/Methodology:**

type of model used or methodology development is a focus of resource

Exposure Change Prediction

## **Resource Type:**

format or standard characteristic of resource

Policy/Opinion, Research Article

## **Timescale:**

time period studied

Time Scale Unspecified